



the CARRIER.....

Published Monthly by the Mount Diablo Amateur Radio Club

MDARC FIELD DAY CALL W6CX; 2M REPEATER W6CX/R 220 REPEATER W6CX/R MEMORIAL CALL SIGN W6LGW

Volume XXX

June 1982

No. 6

"REMEMBER AUGUST 1"

CLUB CALENDAR



THINK FIELD DAY!!!
GREATEST EVENT OF THE YEAR
setup Fri. 25 at 11:00 am
ON THE AIR SAT. & SUN.

- June 17: DARC meets Homestead Savings
Antioch.
- June 18: MDARC General meeting 8PM
- June 21: Board Meeting 8:00 P.M.
County OES Bldg. 50 Glacier
Dr. Martinez. Everyone Welcome
- June 22: Field Day meeting, 8 PM
Lafayette Federal Savings
and Loan, Walnut Creek.
- June 26-27 FIELD DAY
- Aug. 1: For comments on the ARRL peti-
tion RM-4040 before the FCC to
ban CATV from the Amateur Spec-
trum.

Meeting Notice

This months meeting will be held
at our regular meeting place, Grace
Valley Presbyterian Church, 2100
Tice Valley Blvd., Walnut Creek,
Friday, June 18, 1982, at 8PM.

The speaker will be none other
than Super Field Day'er, Dr. Don,
F.D., also known as W6EEN, Ever
since Don and his sidekick Ron,
K6XC have been planning Field
Days scores have been higher and
the fun unimaginable! Be at the
meeting for the latest scoop.

Nets

"Ya all check in now ya Hear!"
Tech Forum/Swap NET
Thursdays 7:30 P.M. 147.66/06
Contra Costa Emergency NET
Thursdays 8:30 P.M., 146.43 MHz simp.
Parky NET
Every Night 3895 +/- QRM 10 P.M.
DARC NET
Thursdays 7PM on 146.54 MHZ
COCORA NET
Mondays 7:35 PM on 147.135/735

EDITOR: Doug Smith, WA6GON P.O. Box 23222, Pleasant Hill, Calif. 94523 0222

PRESIDENT.....	KT6X	Dick Brown	4125 Sacramento St., Concord CA 94521 687-9048
VICE-PRESIDENT.....	WB6TEE	Don Peattie	2417 Lomond Ln. Walnut Creek CA 94598 935-2636
SECRETARY.....	N6EJU	Dee Koester	438 Diablo Court, Martinez, CA 94553 228-8727
TREASURER.....	KA6IZI	Nancy Hodgson	120 Summit Road Walnut Creek, CA 94598 933-8716
EMERGENCY COORDINATOR..	WA6OFI	Dave Greenhill	188 Brown Drive Pacheco, CA 94553 686-6657
BOARD MEMBER.....	K6XC	Ron Luttringer	440 Diablo Court, Martinez, CA 94553 229-3987
BOARD MEMBER.....	N6EEQ	Don Bertrand	1981 Willow Pass, Concord, CA 94520

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Next Board Meeting at: C.C. County O.E.S. Building, 50 Glacier Dr., Martinez, June 21, 1982

DEADLINE FOR THE NEXT ISSUE: Articles, Classified Ads, etc. by June 29, 1982

MDARC Board Meeting

May 24, 1982

QTH: 50 Glacier Drive, Martinez

The meeting was called to order at 8:01 and very speedily handled by our President Dick Brown KT6X.

Board members present were: Don, WB6TEE, Dee, N6EJU; Jim, KA6IVF; Nancy, KA6IZI; Ron, K6XL and N6EEQ, Don.

Members present included: Rick, NA6Q; Joe, WA6DQN.

M.M.S.P. that minutes be approved as printed in the CARRIER.

Unfinished Business: The Board met by telephone prior to the General meeting and approved the appointment of Jim House, KA6IVF as Club Emergency Coordinator. Carolyn Dahl, KA6LSK will be Social Chairman for the remainder of the year.

Each Chairman is to have a synopsis for each function handed in to Ron, K6XC no later than June 5.

Coffee Chairman: Page and Hal Jones, NI6A are our new Coffee Chairman and the Board wishes to thank them for volunteering.

Vice President: Don, WB6TEE reported that the June meeting speaker will be Don Doughty W6EEN.

Treasurer: Nancy, KA6IZI reports we have \$1,340.58 in checking and \$2,226.56 in savings. She also had a request that inventory sheets be handed in.

Membership: is now at 230 members.

Emergency Coordinator: Jim House KA6IVF reported that our first liason with civil air patrol took place during the recent S.E.T. and it went quite well.

Door Prize: Balance of \$114.18

Education Chairman: Rick NA6Q looking for volunteer teachers, either code or Theory for fall classes.

Picnic: Rick informed us that the picnic will be July 18, 12 to 6 PM. Help is needed for talk in. Club will supply soft drinks, watermelon, charcoal and ice. A check for \$35.00 was given to N6EJU, Dee for the above.

Public Service: Joe, WA6DQN, needs operators for Safe Boating, June 5-6-7.

Auction: Possible for October

Repeater: M.M.S.P. that a letter be written to John Anslow, WA6DPJ requesting batteries. The Board recommends that a letter be written to N.A.R.C. requesting letter finalizing sanction.

Directory: Advertizers for directory are the Base Station, Lafayette Federal Savings and Loan, Computerland

New Business: Discussed by the Board was the suggestion by Dick Squires that we have a \$500.00 Scholarship Fund.

Discussion by the Board took place as to whether or not we should join the C.C.R.C. General opinion was that we should not. M.M.S.P. that the meeting be adjourned at 9:35 P.M.

Respectfully Submitted
Dee Koester N6EJU
Secretary

MDARC PICNIC



Sunday, July 18th is drawing near, so don't forget about the Club picnic. You say you need the details? Well, here they are, so make note of them:

WHEN: Sunday, July 18th, from 12 noon to 6PM.

WHERE: The QTH of Joe Simpaon, KA6EBF (watch the July CARRIER for a map.)

WHAT EVENTS: - FUN

- A presentation of Dog training given by Joe (He's a Pro)
- A Softball game (anyone interested?)

A Novice operating tent (for all you novices, would - be hams, and has - been Hams)
- EATS!

What you need to bring: Yourself and your family. Also, bring some food, like hamburgers and hot dogs. Also, bring your sporting gear for the ball game.

What the Club will provide: The site (thanks, Joe). Also, the Club will provide: Soft Drinks, Bar-B-Ques, Charcoal, maybe some watermelon, Too!

SEE YOU AT THE PICNIC!
Rick

The President's Corner....

Some interesting ideas were raised at the last General Meeting and discussed at the Board Meeting. I hope you will give them some thought. Dick Squires suggested that we establish a \$500.00 scholarship fund to be awarded to further the education of an Amateur. The boards discussion centered around the following thoughts.

1. Is this something that we as a Club feel strongly about?

2. Once started, it should be done indefinitely, thus committing us financially.

3. It would need to be funded from some additional source but preferably not from dues. Possibly be direct donations to the fund.

It would require several key people to be involved to arrange financing, publicity, establish selection criteria, and screen the candidates.

5. Maybe we should donate our funds directly to an already established scholarship foundation.

Let the board members know your thoughts on this so a decision can be made next month. Repeater jamming was also mentioned. I would like to address this in the near future. Let me know your thoughts.

By the time you read this Ron, K6XC will be nearing completion of our "Club of the year" submission. Committee heads should have your write-ups to him.

K06R, Peter, will order twenty magnetic Amateur Radio signs so get your request to him A.S.A.P. He has been given the requests from the sign-up at the May General Meeting.

THINK FIELD DAY!!!! If you can't be on the hill be sure to give the Club as many points as you can by contacting W6CX on each band.

Dick, KT6X

Treasurer's Report

Thank you to Dick Brown for expressing his support for the QST subscription program at the May club meeting. Recent QST subscribers (ARRL members) are Dee Koester, J.W. Sheley, Jim House, and Milan Petrovich. For each subscription the club earns \$2.00. When you receive your notice from ARRL indicating renewal time is near make checks payable to Mt. Diablo Amateur Radio Club and mail them with the application card to me or bring them in at the monthly meeting.

Nancy Hodgson KA6IZI

MDARC General Meeting

May 21, 1982

The meeting was called to order at 8:03 by our President Dick Brown, KT6X.

Visitors: welcomed with a round of app-ause were W6IGF, Carl, A.C. Davis, N6XU, Les, Margaret and Jim Blankenship.

Upgrades: KA6TNW, Harry, Novice, N6EEQ, Don, Advanced and KA6DXY, Jim to Advanced.

M.M.S.P.: that minutes be approved as printed in the CARRIER.

Secretary: Request made by yours truly to inform Secretary of those who are hospitalized or ill so that proper correspondence can be sent.

Treasurer: Nancy KA6IZI reports that we have \$1,244.38 in checking and \$2,226.56 in savings.

Emergency Coordinator: The Board has regretfully accepted the resignation of Dave Greenhill WA6OF1, Dave has done a great job as E.C., and we wish to thank him. Taking over as Club Emergency Coordinator for the remainder of the year will be Jim House, KA6IVF.

Directory Chairman: Al DeRosier reports directory ready to go.

Door Prize Chairman: Val KD6KV reports all going well.

Safeboating: June 5,6,7, Two meter station will be set up with traffic being handled thru the National Traffic Net, as a demonstration for the general public.

Field Day: Don Doughty W6EEN reminded us of Field Day meeting on Thursday May 27, and that our next General meeting would be devoted to Field Day.

Larry, W6CPO announced a Red Flag Fire Camp demonstration for June 3.

Larry is our C.D.F. Coordinator.

Picnic: Rick, NA6Q informed the group that our Club Picnic will be held at the ranch of one of our own Club members Joe Simpson, KA6EBF.

Social Chairman: Due to the resignation of Rick NA6Q, Carolyn Dahl KA6LSK, has graciously accepted the position. Thank you Carolyn.

Tech Forum: Jim WA2CEP announces, "all is well".

Lecturn: After a short discussion a motion was made and passed that the Club purchase same for \$200.00 from Dwayne, W6LKE.

M.M.S.P.: that 20 more magnetic signs be ordered. Peter, K06R will be in charge of signs this year.

After a short break for coffee, doughnuts and chatter Dick introduced our speaker for the evening. Mr. Pete Petrovich.

The meeting was adjourned at 10:35.

Respectfully submitted Dee Koester, N6EJU
Secretary

SWR - A CASE FOR THE DEFENSE

One of the things that Ham and CB operators have in common is the quest for a "LOW SWR". In most H.F. Ham and CB applications this is an unnecessary endeavor resulting in wasted work and money. There are many antenna systems that are not used at their full potential because the SWR is "TOO HIGH" in some part of the band. At the same time there are some antenna systems that look good because they have a "LOW SWR" when in fact something may be wrong (like bad coax) that makes the SWR "look good" if measured in the shack. Let us take a look at some of the things that "SWR" does and does not do for and to us.

FACT: "The power handling ability of a feedline is reduced if the SWR is greater than one". Let us first look at a line with a SWR of 1/1. Let this line transport 1 KW from a transmitter to a load. Also let the loss of this line be low enough to be ignored. If the Z of this line is 50 ohms the voltage of the forward traveling wave will be some 225 VAC. If the SWR on this same line is 3/1 then the maximum RF voltage at some point on that line, due to the interaction of the forward and the reverse traveling waves, will be the square root of the SWR X 225 VAC or some 390 VAC. At some other point, 90 electrical degrees away, and also due to the interaction of the two traveling waves, the RF voltage will be 225 VAC X 1/square root of the SWR or some 130 VAC. If the maximum voltage rating of this line was say 225 VAC then we may damage the line with a SWR of 3/1 due to the 390 VAC that is present at one or more points on the line. If we reduce the power transported by 1/SWR and with a SWR of 3/1 then the new power level is 333 watts. At 333 watts with a 50 ohm "flat" line the voltage is some 130 VAC. At 333 watts and a SWR of 3/1 the maximum voltage will be some 225 VAC and the minimum will be some .75 VAC. From all this we can now see how and why the rating of a transmission line should be reduced by 1/SWR. Keep in mind tho that a feedline such as RG/8u has a voltage rating of some four or five KV up to 30 MHZ. At our legal power limits we can run a rather "high" SWR without coax damage. At VHF and UHF this is not so but then there are some more compelling reasons for a low SWR at VHF - UHF. (high "flat line" loss)

FACT: "The "Z" looking into the input end of the feedline does not equal the Z

of the line when the SWR is not 1/1". This is true as I have said before. However any complex impedance seen looking into the line at the shack end can be "matched" with some combination of: 1 - the transmitter output network; 2 - a external antenna coupler; 3 - in some cases the use of a "selected" line length.

FALLACY: "Reflective power is lost power and that it will damage my transmitter". Just about all the basic books on antennas/feedlines mention "reflective loss" at the load but very few mention "reflective gain" at the "matching point". Entire chapters of books have been devoted to this concept (and no doubt even entire books) so I will not try to show the how and why in the few lines I can put here. Rather, I will reference you to October 1973 QST. ON PP22 W2DU gives a rather good explanation. In fact if you read all of his writings and some of his references you may find out more than you want to know about SWR and feedlines.

For now let us look at the forward and reverse traveling waves. There is a forward wave of E and one of I. The ratio of E/I = the Z of the line at all points. This E and I are in phase with each other at all points and at all times. There is also a reverse traveling wave of E and of I. The ratio of E/I = the Z of the line at all points also. The E and I of this reverse traveling wave are 180 degrees out of phase with each other at all points on the line and at all times. Note that both the E and I of this reverse wave pass through zero at the same time. It is just that when one is at maximum plus the other is at maximum minus. It is the interaction of these two traveling waves, at each and every point on the line, that produces the complex impedance looking into the line at that point and also the "standing waves" of E and I. The "Z" and the "SWR" at any point on the line is determined by the Z of the line, the line loss, the complex Z of the load and the distance from the load.

I will call the product of the E and I of each traveling wave "Power". Some writers object to this but I think it is just a matter of semantics. If a traveling wave of that magnitude were dissipated into a load that power would be produced.

Let us look at some antenna /line/ frequency combination such that the line loss with a SWR of 1/1 is 3db. Let me also say that a wattmeter in the line at the antenna end indicates 133 watts forward power and 33 watts reverse power.

Tech cont'd

The SWR in terms of "power" is:

$$VSWR = \frac{1 + \sqrt{\frac{\text{REFLECTED POWER}}{\text{FORWARD POWER}}}}{1 - \sqrt{\frac{\text{REFLECTED POWER}}{\text{FORWARD POWER}}}}$$

From this it can be derived that the SWR at the load is 3/1. Back at the transmitter end of the line the forward power is some 266 watts. (remember: 3db flat line loss) Likewise the reverse power at this end is some 16 watts. Once more we can calculate the SWR at this end as 1.66/1 or so.

As I said the reverse power will add with the transmitter output power to produce the forward power. From this we can see that the transmitter output power is 266 - 16 = 250 watts. Likewise the power "taken" by the load is 133 - 33 = 100 watts dissipated in the load the total loss is some 4db. The extra line loss is only 1db. A receiving station won't be able to tell the change if this 1 db extra line loss could be "switched" in and out. In the real world of radio it takes a change of some 2 or 3 db for the other station to notice. Remember that the band will change many tens of db from open / closed.

On PP 82 and 83 of the ARRL Antenna Book are two charts showing how the SWR in/out relationship along with the additional line loss due to the SWR depends on the flat line loss. (SWR = 1/1) Make some calculations using the flat line loss of your feedline. I think that you will find a "SWR limit" of 2 or 3 is self inhibiting.

On VHF and UHF the "flat line loss" may be so high that any feedline at all has too much loss even at a SWR of 1/1. Even when that is not the case the additional line loss due to SWR may be more than we can afford. This, along with the fixed tuned transmitters, dictate a low SWR, at least at the transmitter end.

At the other end of the spectrum is open wire line at H.F. With its' very low loss and high power capability it can transport large power levels at very high SWR - efficiently.

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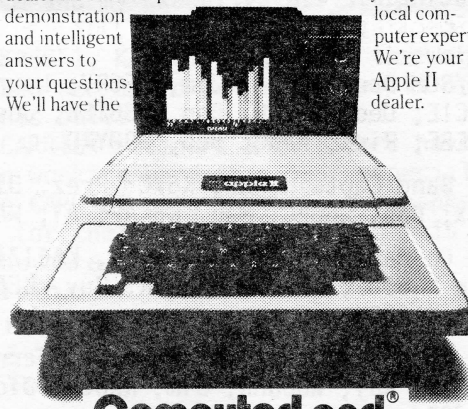
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See Russ-KA6BPN

Field Day

W6CX will once again be heard from the top of Mt. Diablo during the Annual ARRL Field Day exercise. The actual starting time for the event is Friday June 25th at 11:00 A.M. when set up officially begins.

From 11:00 AM Saturday June 26th until 11:00 AM Sunday the 27th we will concentrate on making as many contacts as possible. After teardown and cleanup Sunday a tired but happy band will journey back down the mountain.

We have had two organizational meetings so far and the group consensus is that we will operate in the 6A category using up to 200 watts input with emergency power. We will be encouraging offsite contacts on all bands in both CW and SSB modes. Of course, if you can get up to the mountain top you are certainly invited to come up Friday, Saturday and/or Sunday to help setup, visit, operate, and generally join in the fun. We will have one last group meeting on Tuesday June 22, to check out the final details, at 8:00 PM-Lafayette Federal Savings in Walnut Creek. Please attend if you are interested in participating.

Specific assignments so far are as follows:

10M/80M Don, N6EEQ; Jim, KE6RV; Lauren, WA6CIE; Dee, N6EJU; Don, WB6TEE; Joe, KA6EBF; Rick, NA6Q; Bob, WBØYRD.

40M Band Captain-Ron, K6XC; Prez. Dick, KT6X; Bob, W6GEC; Mac, K6KAP; Al, WA6NHD;

20M Co-Band Captains - Nancy, KA6IZI; Ryan KA6IUE; Frank, WA6GYR; Guy, KE6BS; Bob, KA6ODX

15M Band Captain - Don, W6EEN; Terry, WA6NTG; Ray, WB6DHN; Jim, KB6OH; Dick, KA6JCP

2M - Band Captain - Joe, KD6DY; Carl, AI6V; Guy, N6DTU; George, WA6LPR; Guy KE6BS;

220/450 MC - Ken, NA6YOP and Tim WD9BIV

11M - Band Captains Dee, N6EJU and Terry WA6NTG WE NEED VOLUNTEERS!

Novice - Band Captain - Zane, N6FCI w/Jim, KE6RV helping out with 12 or so novice operators.

Head Photographer - George - WB6OHF

MAJOR FACTOTUM - Doug, W6KLM and KA6DPW.

The Club program this month will be centered on Field Day with a quick review of operating procedure, the exchange, duping, etc., and a hand by hand rundown of what and who is involved in this year's effort.

W6EEN

de NI6A

HEALTH AND WELFARE TRAFFIC

"A MESSAGE FOR YOU"

Do you know that during an emergency most phones will be rendered inoperable due to the telephone company being overloaded with emergency calls? Given a major flood, chemical spill, or earthquake phone lines are liable to be out for a week or more depending upon severity of damage and one's location. During these breaks in conventional commercial communications it is amateur radio that can provide communications for the public with the outside world, to loved ones, and relatives for assistance, reassurance, or whatever. The Amateur Radio Emergency Service (ARES) provides communications for local civil defense agencies, govt. agencies, Red Cross, hospitals, and State and Federal disaster agencies and teams. With this, ARES usually has their hands full due to lack of volunteers and rarely has the personnel nor frequencies available to bother with the lower priority health and welfare (H & W) traffic for the general public. Evacuation centers can be staffed by ham radio operators with portable equipment and antennas helping victims fill out radiogram messages and then transmitting such messages into local, section, or region nets or to relay home stations who can check into Northern California Net, Northern California VHF Net, or other reliable traffic nets. Such a system of operators specially trained in written traffic operation would provide a great service to the stranded evacuees

at the same time free up ARES personnel for emergency communications and thirdly create lasting friends and positive publicity for Amateur Radio. Usually, H & W traffic is deprioritized into oblivion by undermanned and overworked ARES organizations.

If you are experienced in handling traffic on phone and/or cw you can be of service as a traffic communications radio operator when radio has a great potential to fulfill.

Please write your Section Traffic Manager (East BAY - NI6A - Donald Simon - 1750 Liberty St. El Cerrito, CA 94530) for a questionnaire sheet to be filled out and returned. Traffic teams are now being formed for the entire section and also for the entire division consisting of both portable and home base relay stations and operators. An operators packet is being prepared for those filling out the questionnaires.

If you are not familiar with formal message handling listen to and check into any of our section nets (Northern Calif. Net-1 3630 KHZ 1900 local time daily: NCN slow speed 3630 Khz 2030 local time daily: NCN VHF 145.41 rptr. down 600 at 1930 daily. As a whole the NTS meets daily in every State in the country with thousands of operators providing an emergency communications network independent of commercial landline sources and barring any major disruption of conventional communications or disasters handles routine messages for the public and fellow operators free of charge.

Please check in when you can for your skill is OUR skill. 73

NI6A, Don Simon 1750 Liberty St. El Cerrito, MDARC member, Asst. EC for NTS West Contra Costa County
Section Traffic Manager: EAST BAY SECTION
20 years plus experience in NTS and ARES/RACES

Dits & Bits / W5YI Report

Cordless Telephones appear to be the next threat to amateur frequencies and rfi. Many industrial firms have petitioned for more spectrum, higher power levels and more liberal technical standards. One petition seeks to increase power levels fed into house wiring on frequencies adjacent to the 160 meter amateur band. The FCC has asked for comments. ARRL firmly opposed said both amateurs and telephone users can expect severe interference if power level is increased to 500 mw.

The Editor's Space



I'm still burning up inside because I missed the last Club meeting. Had to work that evening. After all the noise I've made regarding CATVI I kind of figured I should show up when the cable companies came to speak. But as it turned out, my fellow club members did a bang up job presenting our case to the cable representatives. Based on what I've heard about the questions that were asked and the points presented, MDARC is one of the most well informed groups around. I'm proud of the way you all handled the situation.

Don't let your consternation go unheeded. Fight Back! Write your own letter to the FCC in Washington expressing your desire that CATV leave the Amateur bands--all of them. Not just 145.25 MHZ. Keep plugging OM and YLs. This is one bureaucratic boondoggle we can't ignore. Remember August 1.

Our paste-up parties are ever growing in popularity. The CARRIER has quite a staff now. Attending last months paste-up was W6KLM and my Executive Assistant Mrs. W6KLM, N6EJU our host for the night, A6GYR, KA6GFI, KA6EBT, and Heidi the dog who barked her approval between rolls of the tennis ball.

The CARRIER stampers and folders have all been working hard this year especially when the CARRIER gets thicker. My thanks to them for their hard work so far this year, they are the silent partners of this affair.

K60BB, K6IMV, W6CU & XYL Mildred, WA6JLF & XYL Beth, WB6AEG & XYL Lois, N6GQ & XYL Alma.

I hope you will all blow the dust off the HF rig and give W6CX a contact on every band this Field Day. The organizers have worked hard to make this another terrific Field Day.

73 Ed.

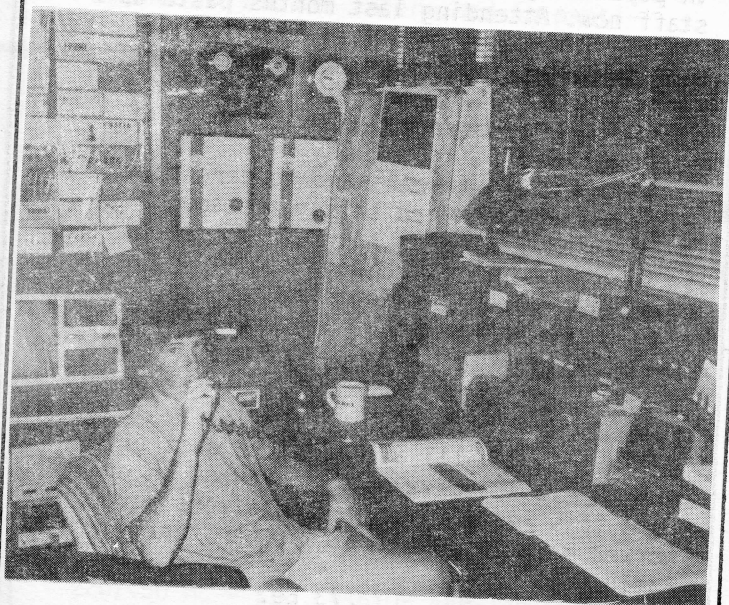
Carrier Classifieds

WANTED: QST, 73 Magazines. QST prior to 1932 and 73 prior to 1971 and any old ARRL books, old electronics books from the "earlier days." Contact WA6GON 1369 Tree Garden Place, Concord, CA 94518 or call work phone 671-3241.

THE SOUTHERN CHAPTER..... news from down south

As I sat down to write this column it suddenly dawned on me that I'm a month late. For those many of you who didn't notice, last month's CARRIER didn't contain a Southern Chapter article. Boy does time fly when you're busy at work and at home. Just have to get my priorities straight I guess. It's terrible when the press of work, little league baseball, boy scouts etc. get in the way of ham radio.

We have three upgrades to report this time, one of whom will be our featured member of the month. Sharon, XYL of Joe, WA6PVA; Marge, XYL of Art, W6HQL; and Chris, eldest son of this writer all advanced to Technician Class since we last communicated. A little c.w. work and soon we'll be reporting their achievement of General Class. My information is that all three have requested new call signs. So, Sharon should be getting her N7 and Marge her N6. Just as I sat down to type this Chris got his new call in the mail. Time elapsed from application to receipt of new call about six weeks.



Chris Boyd, N6GQB, is depicted in the attached photo of what used to be my radio shack. Chris is 14 years of age and is soon to graduate with honors from Sacred Heart school in Coronado, CA. He has been accepted at University of San Diego High School beginning next fall. In some recent tests he scored at the eleventh grade level overall, which explains why he is considerably smarter than his old man.

In addition to Amateur Radio Chris spends his time reading, playing sports (particularly soccer) and raising and training his two Appaloosa horses. Chris' primary love (besides his mom, dad, brothers, and several miscellaneous female classmates) is raising, riding, and training horses. This summer he will be working at a horse ranch exercising horses and training riders on the finer points of western saddle riding, barrel racing, and the like. Chris manages to find time to serve as an ARES volunteer and is a member of the South San Diego County ARES group. His forte' is operating the ham equipment in the Coronado Police Department's Mobile Command Post which was featured in our last article.

I hope to feature Marge Fox and Sharon Rudi in future articles. All that is necessary to achieve such fame is a check to MDARC for membership dues, and a black and white photo plus some brief biographical information directed to me. Hope to see all of you sometime between June 19 and 22 when we anticipate being in the East Bay area on vacation.

'73
Jerry WA6CUP

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Public Service

THE DEVIL CAUSED IT

For the fifth consecutive year the runners of Northern California came in mass May 2, to the Devil Mountain Run in Danville. The pre-race publicity was outstanding, because over 7,000 runners turned out to show their stuff over the 6.2 mile course, through the normally quiet Danville. This will be the 2nd largest run in California for 1982, race officials indicated. It, of course, was surpassed only by the Bay to Breakers "Happening" in the little community across the Bay.

As always, Amateur Radio was on the scene with the operators of the Northgate Repeater Group (WB6BIU) and the M.D.A.R.C. Handling race status and emergency traffic were Dick KT6X (net control), Dee-N6EJU, Frank-N6GQ, Clay-WD6GDG, Doug-W6KLM, Joe-WA6DQN, Don-WB6VHW, Peter-KO6R, Doug-KA6DPW, Bert-KA6AEV. Many certified national and local records were set by the participants, including several world class runners. Prizes were given to the fastest runners and for the best costumes. Some of the outfits were pretty wild. The operators were asked to identify the front runners in each category. Clay-WD6GDG was particularly good at identifying the females.

The big winner was Children's Hospital Medical Center of Northern California, who received the profit from the \$6.00 per person donation. Companies sponsoring the race included Atari, Safeway, Burger King (each operator got a free hamburger) and V-8. Everything went well with only a few minor injuries to the runners. All operators survived without a scratch. Dee tried to turn Highway #680 into a parking lot with her car's mechanical problems, but was rescued by KA6DPW. Thanks to all for a job well done.

Ham Radio Outlet

999 Howard Ave.
Burlingame, CA 94010
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Repeater News

On May 18, 1982 the Rocky Ridge Repeater Group of the MDARC had its quarterly meeting. About one third of the members were present. These are good meetings that don't take very long and effect every user of the repeaters. Make a note to come to the next meeting, a lot of things are discussed and voted on that effect all of you.

Two new members were taken in. Jim House KA6IVF, and Rick Turpin KA6MWQ. Welcome aboard to both of you. The phonetics for Rick's call could be now that he has joined the repeater - (My Wife Quits). An old member who used to be in the repeater when it only had 15 members has returned. Jim, KB6OH formerly known as WB6BBC. Welcome back Jim. Another member made Tech, Helen Holt KA6RNO. Congratulations Helen.

Financially the repeater is in good condition. All bills have been paid thru April, the club has 80 members and the bank balance is \$625.65. It was voted that the dues for the third quarter remain at \$5.00.

The new repeater is finished and ready to be put on the hill. A small problem came up. The road to the repeater had been washed away and the only way to get the new repeater up on the hill was to carry it or by Helicopter at \$150.00 an hour. The road had been locked up at the washed out section. We now has a key and it's passable so the new machine will go up very soon. The new machine should go up in the next 30 days, we hope. We are still trying to purchase the new antenna from DB Products. With the new machine and new antenna the repeater should be one of the best in the bay area.

We are about ready to put up the new antenna on the transmit side of the 220 machine. This should help. One thing the 220 machine needs very badly is HARD LINE. This is very expensive. If any member knows of a source of 50 Ohm 7/8 inch Hard line let me know. We will need 500 feet if we use separte Transmit and receive antennas and only 300 feet if we use a duplexer.

JAMMERS- the group recommends, that all users of both machines when jammers are present, to ignore them completely even if we must stop talking for a while. If nobody is around to listen to them or to talk to them they usually go find a repeater that is being used. To call them "Rubber Heads" and "Lids" etc. only makes them jam more. Most all of them are known and eventually they will be taken care of. So far the machine has not been bothered with them.

Terry Lange has resigned from the repeater group and the office he held in the Steering Committee. KA6LSL Bob Dahl has been appointed to replace Terry. I for one am sorry to see Terry go. He was always a club supporter.

Eventually when the new repeater is up and a few other odds and ends are completed, our beloved chairman Cecil N6EBQ will resign. Cecil's work now takes him out of town a good part of the time and he feels that someone who can devote more time to the repeater should be the chairman. Cecil has done a great job as our chairman for more than a year. He solved the Repeater crisis with the POU machine and has really got the group going great again. He will be missed as our leader but I am sure his voice will still be heard. There is a Railroad Job being done on Dee Koester N6EJU to replace Cecil. I noticed a very slight shimmer of protest from Dee, but I think the Group will vote her in over her protests.

Support the Repeater, Come to the next meeting and help railroad Dee in as the Chairman and make your opinions known to the Steering Committee and the Chairman.

Jay D. Caldis
KT6Y Trustee

National Traffic System NET FREQUENCIES For your information:

NCN 1 - 3630 KHZ Daily - 1900 local time;
NCN 2 - 3630 KHZ daily - 2030 local time -
NCN VHF 145.41 rpttr (- 600) daily - 1930
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7275 SSB - 1045 and 1530 local time daily;
Sixth Region Net Evening 3655 KHZ - 1945
and 2130 daily.

Public Affairs

Send news if important Amateur Radio Events to Betty, KB6UX. Betty will see that ARRL gets the news as well as other media. Report any public service event, accident reports etc to Betty. Let's get the word out.

THINK FIELD DAY!!!
THE GREATEST EVENT OF THE YEAR
Setup Friday June 25 at 11:00
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Tips & Techniques

An old CB 5/8 wave ground plane makes an excellent 15 meter 5/8 wave antenna with only a few minor modifications. The vertical element is extended with peices of aluminum tubing to a length of approximately 27 feet and the radials to a quarter wave length at 15 meters. I just made such a modification and am quite pleased with the results. In a contact on 15 with W6OAV/6 Sunnvale, Bill, OAV indicated two such antennas in a phased vertical array makes a super DX antenna.

Aluminum tubing is available locally at Kelloways Hardware Store on North Main St. in Walnut Creek. Kelloways sells very soft aluminum. If more rigid stock is desired W6AHH, Bob in Daly City recommends Alan Steele, Redwood City and J&H Electronics in San Carlos as good sources for 61-ST or 24-ST aluminum tubing. These two types are apparently much stronger for building antennas that will be quite long.

Some terrific news for magazine collectors. 73 Magazine uses The Jesse Jones Co., Philadelphia, PA. 19141 as their source for magazine binders. Jesse Jones sent along a very interesting catalog with my last binder order. They are specialists in "custom organizers for business and home."

You'll find titled magazine binders for almost any periodical or journal, magazine file cases, phone book covers, and you can even special order items made to your specifications. Send for a catalog.

WA6GON

Old Dog's Tail



One day a dog came limping into Dodge City. He was limping up the street past the sheriff's office and seeing the sheriff, the dog said, "Howdy, sheriff." The sheriff replied, "Howdy dog."

The dog went on and limped past the barber shop, seeing the barber, he said, "Howdy, barber." The barber replied, "Howdy, dog." Then the dog limped into a saloon and sat down by the bar. The bartender walked over and said, "Howdy, dog, what are you doing in town?"

The dog replied, "I'm looking for the man who shot my paw."

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HY-GAIN 14-AVQ 4 band vertical
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B&W 80-10 meter trap dipole kit
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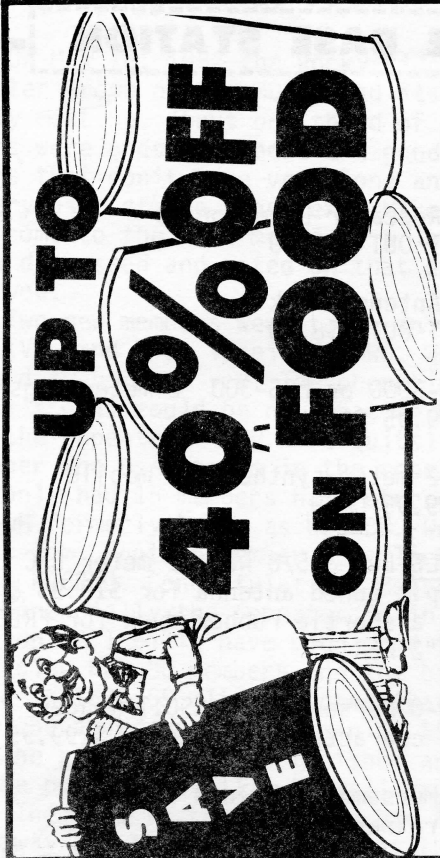
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